

BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY OLIGONUCLEOTIDES AND USES THEREOF

Abstract

The present invention relates to a first group of novel oligonucleotides, here identified as Genomic Address Messenger or GAM oligonucleotide, and a second group of novel operon-like polynucleotides, here identified as Genomic Record or GR polynucleotide. GAM oligonucleotides selectively inhibit translation of known `target` genes, many of which are known to be involved in various diseases. Nucleic acid molecules are provided respectively encoding 15454 GAM precursors oligonucleotides, and 681 GR polynucleotides, as are vectors and probes both comprising the nucleic acid molecules, and methods and systems for detecting GAM oligonucleotides and GR polynucleotides and specific functions and utilities thereof, for detecting expression of GAM oligonucleotides and GR polynucleotides, and for selectively enhancing and selectively inhibiting translation of the respective target genes thereof.